

## CLAIMS

1. An information processing apparatus for executing a process of selecting a content suiting preference of a user, comprising:

attribute information obtaining means for obtaining attribute information of said content;

operation history obtaining means for obtaining an operation history of said user;

preference information generating means for generating first preference information indicating positive factors of the preference of said user and second preference information indicating negative factors of the preference of said user on a basis of said operation history obtained by said operation history obtaining means; and

recommendation information generating means for generating recommendation information indicating the content recommended for viewing to said user by calculating a degree of similarity between said first preference information and said attribute information and a degree of similarity between said second preference information and said attribute information independently of each other.

2. The information processing apparatus as claimed

in claim 1, wherein:

said first preference information and said second preference information generated by said preference information generating means and said attribute information obtained by said attribute information obtaining means each include a plurality of items;

said preference information generating means directs attention to one of said items of said operation history obtained by said operation history obtaining means, and generates said first preference information and said second preference information by elements of said item to which said preference information generating means directs attention; and

said recommendation information generating means extracts said first preference information and said second preference information corresponding to said elements of said attribute information, and calculates a degree of similarity between said first preference information and said attribute information and a degree of similarity between said second preference information and said attribute information.

3. The information processing apparatus as claimed in claim 1, wherein:

said recommendation information generating means

generates recommendation information indicating said content having a low degree of similarity to each of said first preference information and said second preference information on a basis of independent results of the calculation of the degree of similarity between said first preference information and said attribute information and the degree of similarity between said second preference information and said attribute information.

4. The information processing apparatus as claimed in claim 1, wherein:

said first preference information and said second preference information generated by said preference information generating means and said attribute information obtained by said attribute information obtaining means are vectorized by predetermined items.

5. The information processing apparatus as claimed in claim 4, further comprising normalization processing means for normalizing at least a part of the attribute information of said content and said first preference information and said second preference information by said items,

wherein said recommendation information generating means generates said recommendation information by

calculating, independently of each other, a degree of similarity between said first preference information and the attribute information of said content and a degree of similarity between said second preference information and the attribute information of said content, at least the part of the attribute information of said content and said first preference information and said second preference information being normalized by said normalization processing means.

6. The information processing apparatus as claimed in claim 4, wherein:

said recommendation information generating means generates said recommendation information on a basis of a calculation of an inner product of said first preference information generated by said preference information generating means and said attribute information obtained by said attribute information obtaining means and an inner product of said second preference information generated by said preference information generating means and said attribute information obtained by said attribute information obtaining means.

7. The information processing apparatus as claimed in claim 4, wherein:

said predetermined items include major items and

minor items obtained by further dividing said major items into details; and

said recommendation information generating means calculates, by said major items, an inner product of said first preference information generated by said preference information generating means and said attribute information obtained by said attribute information obtaining means and an inner product of said second preference information generated by said preference information generating means and said attribute information obtained by said attribute information obtaining means, and generates said recommendation information on a basis of a sum of results of the calculation of the inner products.

8. The information processing apparatus as claimed in claim 1, wherein:

said operation history obtaining means divides the obtained said operation history into a first operation history indicating contents that said user likes and a second operation history indicating contents that said user does not like; and

said preference information generating means generates said first preference information on a basis of said first operation history and generates said second

preference information on a basis of said second operation history.

9. The information processing apparatus as claimed in claim 8, wherein:

said recommendation information generating means generates said recommendation information on a basis of a value obtained by subtracting the degree of similarity between said second preference information generated by said preference information generating means and said attribute information obtained by said attribute information obtaining means from the degree of similarity between said first preference information generated by said preference information generating means and said attribute information obtained by said attribute information obtaining means.

10. The information processing apparatus as claimed in claim 1, further comprising display means for displaying said recommendation information generated by said recommendation information generating means.

11. The information processing apparatus as claimed in claim 1, further comprising:

receiving means for receiving said content; and  
selection controlling means for controlling  
selection of said content received by said receiving

means on a basis of said recommendation information generated by said recommendation information generating means.

12. The information processing apparatus as claimed in claim 11, further comprising recording means for recording the received said content selected by said selection controlling means.

13. An information processing method of an information processing apparatus for executing a process of selecting a content suiting preference of a user, comprising the steps of:

obtaining an operation history of said user;

generating first preference information indicating positive factors of the preference of said user and second preference information indicating negative factors of the preference of said user on a basis of said operation history obtained by a process of said operation history obtaining step; and

generating recommendation information indicating the content suiting the preference of said user by calculating a degree of similarity between said first preference information and said attribute information and a degree of similarity between said second preference information and said attribute information independently

of each other.

14. A recording medium on which a computer readable program for making a computer perform a process of selecting a content suiting preference of a user is recorded, comprising the steps of:

obtaining an operation history of said user;

generating first preference information indicating positive factors of the preference of said user and second preference information indicating negative factors of the preference of said user on a basis of said operation history obtained by a process of said operation history obtaining step; and

generating recommendation information indicating the content suiting the preference of said user by calculating a degree of similarity between said first preference information and said attribute information and a degree of similarity between said second preference information and said attribute information independently of each other.

15. A program for making a computer perform a process of selecting a content suiting preference of a user, comprising the steps of:

obtaining an operation history of said user;

generating first preference information indicating



positive factors of the preference of said user and second preference information indicating negative factors of the preference of said user on a basis of said operation history obtained by a process of said operation history obtaining step; and

generating recommendation information indicating the content suiting the preference of said user by calculating a degree of similarity between said first preference information and said attribute information and a degree of similarity between said second preference information and said attribute information independently of each other.